

BOROUGH OF WHITEHAVEN



ANNUAL REPORT

OF THE

**MEDICAL OFFICER
OF HEALTH**

FOR THE YEAR 1969

AND REPORT OF THE

**CHIEF PUBLIC HEALTH
INSPECTOR**



BOROUGH OF WHITEHAVEN
HEALTH AND HOUSING COMMITTEE

1969 - 70

Chairman Councillor J. B. McAllister.

Vice-Chairman Alderman J. Walsh

Members :

THE MAYOR (Councillor Mrs. F. M. Reed).

Aldermen — W. E. Knipe, J. McMean, H. McGill.

Councillors — C. R. Bailey, J. Boylan, J. L. Johnston.

HEALTH DEPARTMENT STAFF

Medical Officer of Health :

J. E. O'Malley, M.R.C.S., L.R.C.P., D.P.H.

Chief Public Health Inspector :

A. A. Beldon, C.R.S.I.

Additional Health Inspectors :

P. Eldon, C.R.S.I. A. Foster, C.R.S.I.

Clerk-Typist : Miss G. Banks

Tel. :

Whitehaven 3821.

Flatt Walks Clinic,

Whitehaven.

Mr. Mayor, Ladies and Gentlemen,

I beg to submit the Annual Report of the environmental health and sanitary circumstances of the Borough for the year 1969.

I wish to express my grateful appreciation to Mr. Beldon and his staff and the Borough's Chief Officers for their constant help and co-operation during the year.

I am, Mr. Mayor, Ladies and Gentlemen,

Your obedient servant,

J. E. O'Malley, M.R.C.S., L.R.C.P., D.P.H.

SECTION A.

STATISTICAL SUMMARY

1.—General Statistics

Area of Borough in acres	...	...	...	...	4,315
Population (Registrar - General estimate, mid-year 1969)	...	...	...	...	26,760
Population, Census 1961	...	...	...	...	27,566
Persons per acre	...	...	...	...	6.2
Number of inhabited houses, 1969-70, according to rate books	...	...	...	...	8,349
Rateable Value, 1st April, 1970	...	...	...	...	£1,083,414
Estimated Product of a Penny rate, 1970-71	...	...	...	...	£4,325

VITAL STATISTICS

(a) Number of legitimate live births	...	...	395	
Number of illegitimate live births	...	...	31	(4.8%)
Total live births	...	...	426	
Crude Birth Rate per 1,000 of population	...	...	15.9	
Adjusted Birth Rate per 1,000 of population	...	...	14.8	
(b) Number of legitimate still births	...	...	4	
Number of illegitimate still births	...	...	—	
Total still births	...	...	4	
Still birth rate per 1,000 live and still births	...	...	9	

DEATHS

(a) Infant Deaths (deaths under 1 year)				
Legitimate infants	...	...	...	8
Illegitimate infants	...	...	...	1
Total infant deaths	...	...	...	9
Infant Mortality rate per 1,000 live births	...	...	21	
Legitimate infant deaths per 1,000 legitimate live births	...	...	20	
Illegitimate infant deaths per 1,000 illegitimate live births	...	...	32	

(b) Neo-Natal mortality rate (deaths under 4 weeks per 1,000 total live births)	14
(c) Early Neo-Natal mortality rate (deaths under 1 week per 1,000 total live births)	9
(d) Perinatal mortality rate (still births and deaths under one week per 1,000 total live and still births) ...	19
(e) Maternal mortality (including abortion)	Nil
(f) Deaths at all ages	317
Crude death rate per 1,000 of population	11.8
Adjusted death rate per 1,000 of population ...	14.4

Statistics for the Borough are shown in relation to those of the County and England and Wales in Table 1.

TABLE 1.
Comparative Statistics

	Birth Rate	Death Rate	Infant Mortality Rate
Whitehaven Borough	15.9	11.8	21
Cumberland (Administrative County) ...	15.2	12.3	19
England and Wales	16.3	11.9	18

Table 1 shows only crude rates; corrected rates are given in the subsequent tables.

TABLE 2.
Birth Rates

Year	Number of Births	Whitehaven	Birth Rate per 1,000 of population : England & Wales
1965	515	17.6	18.1
1966	443	16.3	17.7
1967	484	18.2	17.2
1968	464	17.4	16.9
1969	426	14.8	16.3

There was a decrease of 2.6 in the birth rate over the figure for the previous year, and it was lower than the rate for England and Wales. The stillbirth rate was down by 1.6 over the year 1968.

Table 3 shows death rates over the past five years.

TABLE 3.
Death Rates

Year	Number of Births	Death Rate per 1000 of population :	
		Whitehaven	England & Wales
1965	298	14.3	11.5
1966	284	13.1	11.9
1967	298	12.8	11.2
1968	312	13.3	11.9
1969	317	14.4	11.9

The adjusted death rate is 1.1 higher than that for the preceding year, whilst the rate for England and Wales remains the same.

There were no maternal deaths.

TABLE 4.
Infant Death Rate

Year	Number of Infant Deaths	Death Rate per 1,000 live births :	
		Whitehaven	England & Wales
1965	8	16	19
1966	10	14	19
1967	8	16	18
1968	9	19	18
1969	9	21	18

The number of infant deaths remains the same as for 1968, giving a rate of 21 per 1,000 live births, which is 3 higher than the rate for England and Wales. Six, or just over 66% of the deaths, occurred in the neo-natal period, that is within the first month of life. The neo-natal mortality rate was 14 per 1,000 total live births, compared with a corresponding rate for England and Wales of 12. The peri-natal mortality rate, comprising stillbirths and deaths under one week, was 19, while that for the country as a whole was 23.

TABLE 5.
Deaths of Infants under 1 year of age.

Cause of Death	Under 4 weeks		Over 1 month	Totals
Congenital Anomalies	...	1	1	2
Birth Injury	...	2	—	2
Other Causes of Perinatal Mortality	...	1	—	1
Accident	...	1	1	2
Infective and Parasitic Diseases	...	1	—	1
Diseases of Respiratory System	...	—	1	1
Total Deaths	...	6	3	9

Cancer Mortality

There were 65 deaths from cancer, the primary sites of the disease being shown in Table 6, while in Table 7 are given death rates for the Borough and England and Wales.

TABLE 6.
Deaths from Cancer

Location of Disease	Male	Female	Total
Stomach 	9	4	13
Intestine 	4	5	9
Lung and Bronchus ...	22	2	24
Breast 	—	3	3
Prostate 	1	—	1
Other sites 	7	6	13
Blood 	2	—	2
	45	20	65

In 1969, the total of 65 deaths was an increase of 22 over the number for the previous year. The mortality rate of 2.43 per 1,000 of population was 0.8 higher than the national rate.

TABLE 7.
Cancer Death Rates

Year	Number of Deaths	Annual Death Rate per 1,000 of population :	
		Whitehaven	England & Wales
1965	56	2.05	2.23
1966	61	2.21	2.25
1967	41	1.63	2.27
1968	43	1.59	2.26
1969	65	2.43	2.35

TABLE 8.
Causes of Death during the year 1969

			Males	Females
Other Infective and Parasitic Diseases	...		1	—
Malignant Neoplasm, Stomach	...		9	4
Malignant Neoplasm, Intestine	...		4	5
Malignant Neoplasm, Lung, Bronchus	...		22	2
Malignant Neoplasm, Breast	...	...	—	3
Malignant Neoplasm, Prostate	...	...	1	—
Leukaemia	...	...	2	—
Other Malignant Neoplasms	...	...	7	6
Diabetes Mellitus	...	...	3	3
Other Diseases of Nervous System, Etc.			—	3
Chronic Rheumatic Heart Disease	...		3	4
Hypertensive Disease	...	...	3	3
Ischaemic Heart Disease	...	...	47	40
Other forms of Heart Disease	...	...	5	3
Cerebrovascular Disease	...	...	18	23
Other Diseases of Circulatory System	...		7	8
Influenza	...	...	2	2
Pneumonia	...	...	4	11
Bronchitis and Emphysema	...	...	6	6
Asthma	...	...	—	1
Other Diseases of Respiratory System	...		7	2
Peptic Ulcer	...	...	3	1
Intestinal Obstruction and Hernia	...		1	2
Other Diseases of Digestive System	...		1	2
Nephritis and Nephrosis	...	...	1	—
Other Diseases, Genito-Urinary System	...		—	2
Congenital Anomalies	...	...	2	—
Birth Injury, Difficult Labour, Etc.	...		1	1
Other Causes of Perinatal Mortality	...		1	—
Symptoms and Ill Defined Conditions	...		3	7
All Other Accidents	...	...	4	4
Suicide and Self-Inflicted Injuries	...		1	—
Total (all causes)	...	...	169	148
			317	

SECTION B.

GENERAL PROVISION OF HEALTH SERVICES

(a) Staff

There were no changes in staff during the year.

(b) Laboratory Facilities

Use is made of the bacteriological facilities at Whitehaven Hospital and of the Public Health Laboratory Service at the Cumberland Infirmary. Analytical services are provided by the Laboratory or by Public Analysts.

(c) Local Health Authority Services

Medical services provided under Part III of the National Health Service Act are the responsibility of the Cumberland County Council. Information about the provision of Home Nursing, Home Helps, Immunisation and other services is available at the office of the Area Medical Officer, Area Health Office, Flatt Walks, Whitehaven.

Type of Clinic	Flatt Walks	Mirehouse	Woodhouse
School Clinic	Wed. 10-11 a.m.		
Child Welfare	Tues. 2-4 p.m.	Mon. 2-4 p.m.	Wed. 2-4 p.m.
Ante-Natal	Fri. 2-4 p.m.	Wed. 2-4 p.m.	Mon. 2-4 p.m.
Dental	Daily 9-30 a.m.		

Attendance at the consultant and other special clinics at Flatt Walks is by appointment only. Sessions are held as follows:— Child guidance, speech therapy, hearing assessment and training, and chiropody.

The Junior Training Centre, Hensingham, has 75 places for sub-normal children, including 10 places in a special care unit for children who have severe or multiple disabilities.

(d) Hospital Services

The West Cumberland Hospital, as the district general hospital, provides a full range of specialist services and an emergency service at all times.

Whitehaven Hospital undertakes geriatric accommodation and provides geriatric day hospital care.

(e) National Assistance Acts

No enforcement action was taken during the year to secure proper care and attention for the elderly and chronic sick.

SECTION C.

SANITARY CIRCUMSTANCES OF THE AREA

A report by the Chief Public Health Inspector on the work of the year has been submitted and will be found at the end of this report.

SECTION D.

PREVALENCE OF, AND CONTROL OVER, INFECTIOUS AND OTHER NOTIFIABLE DISEASES

Notifications, other than those of tuberculosis, are shown in Table 9.

TABLE 9.
Infectious and Other Notifiable Diseases

Disease	No. of Cases Notified				Died
Scarlet Fever	...	...	...	10	—
Measles	...	...	...	18	—
Dysentery	...	...	...	1	—
Typhoid Fever	...	...	...	1	—
Infective Jaundice	...	...	...	16	—

Immunisation and Vaccination. During the year 245 children were vaccinated against smallpox; 2,810 received protection, primary or booster against Diphtheria and Tetanus, and Poliomyelitis oral vaccine was given in 915 cases.

TUBERCULOSIS

Notifications in 1969 were received as follows :—

TABLE 10.
Tuberculosis Notifications

	Respiratory		Non-Respiratory		Total
Male	...	5	...	2	7
Female	...	2	...	3	5
Total	...	7	...	5	12

Altogether, new cases of tuberculosis showed an increase of 1 compared with the figures for 1968. The respiratory cases were 1 fewer, while the non-respiratory cases increased by two. The incidence rates are given in Table 11.

TABLE 11.
Tuberculosis Incidence
Notifications per 100,000 of the Population

Year	Respiratory :		Non-Respiratory :	
	Whitehaven	England & Wales	Whitehaven	England & Wales
1962	69	39	7	6
1963	29	36	4	6
1964	15	47	7	6
1965	26	42	7	6
1966	33	26	7	5
1967	26	23	7	5
1968	30	22	11	4
1969	26	20	19	5

B.C.G. Vaccination

Table 12 shows the situation in relation to B.C.G. vaccination in Whitehaven.

TABLE 12.
B.C.G. Vaccination

Year	No. of children eligible for test	No. and % age of parents consenting	Number tested	No. and % age Mantoux positive	No. given B.C.G.
1960	549	446(81%)	428	91(21%)	315
1961	609	467(77%)	437	89(20%)	326
1962	558	438(79%)	414	69(17%)	294
1963	567	447(79%)	389	51(13%)	300
1964	1132	858(76%)	722	83(11%)	568
1965	602	488(81%)	450	89(20%)	292
1966	493	402(81%)	367	36(10%)	246
1967	556	464(83%)	450	58(13%)	332
1968	468	374(79%)	356	43(12%)	250
1969	478	439(91%)	399	55(14%)	285

The percentage of children found to be Mantoux positive and thereby already carrying some immunity to tuberculosis rose by 2% compared with the rate for 1968.

REPORT
OF THE
CHIEF PUBLIC HEALTH
INSPECTOR

Public Health Department,
53 Duke Street,
Whitehaven.

To the Medical Officer of Health,
WHITEHAVEN.

Sir,

I wish to submit my nineteenth Annual Report for the year ended 31st December, 1969.

After many years of intensive activity in the problems of Slum Clearance (which is now virtually completed) attention has been given to furthering the improvement of existing dwellings and to tidying up the dereliction of old vacated properties. The latter can only be satisfactorily achieved by the Corporation replanning and rebuilding areas of the town and this project is being very actively pursued. Until these operations can be completed we will be faced with the sight of dilapidated property, with its attendant nuisances : but at least we can say that this is preferable to occupied slums. This unpleasant stage of transition from the old to the new has to be faced.

House improvement is showing an upward trend after a disappointing time. The generous grants now available have encouraged new applications. A great deal of time is spent on guiding improvement projects through to the end and technical advice is given to the applicants.

The daily round of environmental public health work has been continued and no serious change can be reported on. Some progress has been made under the Clean Air Act and the Offices, Shops and Railway Premises Act.

Generally, the sanitary circumstances of the district are good and progress continues in most fields of the work.

SECTION A.

HOUSING.

NEW BUILDINGS : Twenty-eight dwellinghouses were completed by the Corporation during the year and 53 were under construction on 31st December, 1969.

Forty-six dwellinghouses were completed by private builders and 20 were under construction for the same period.

The great reduction in the building of council houses was planned to prevent overbuilding. This follows from the elimination of slum property and the annual available re-lettings from a large stock of local authority owned dwellings.

DISPLACEMENTS : Seven families were rehoused from unfit dwellings during the year.

PROCEDURE : Seven dwellings were closed by individual action under Housing Act 1957 (16).

REPAIRS : Owing to the elimination of much old property, the time devoted to repair work has been greatly reduced, but is carried out where necessary to maintain dwellings in reasonable condition. The increase in the number of owner-occupied dwellings which are generally well maintained has accounted for much reduction in this item of housing.

DEMOLITIONS : Practical difficulties in carrying out demolition of closed and derelict dwellings continue to be experienced and many must perforce stand in this condition for some time yet. This is due to the indiscriminate mixture of fit and unfit property in a town which has developed as Whitehaven has done. Only redevelopment of complete areas can solve this problem and many delays are unavoidable.

IMPROVEMENTS : The improvement of fit dwellinghouses by the provision of bathrooms, hot water supplies and internal W.C.s has been accelerated during the year due largely to a single property owning company beginning this work and to the greater inducements offered by the Housing Act 1969. Even so, it will take some years to have all dwellings reach this improved standard. Council houses built before 1939 are to be improved by the Local Authority, but this task is necessarily complicated.

Thirty-eight applications were received during the year and 61 houses had improvements carried out.

REDEVELOPMENT : The building of flats in the George Street redevelopment area continued during the year.

OVERCROWDING : No case of statutory overcrowding was observed during the year.

RENT ACT, 1957 : No action was necessary.

CARAVANS : Since the Corporation's caravan site was run down and the itinerant vans cleared from the Moresby Road site, no trouble has been experienced with caravans. Certain families attached to the Showmans' Guild continue to winter in vans sited in the Harbour area but the number decreases annually and some families have been housed in the district.

PUBLIC HOUSES : No comprehensive survey of public houses has been made since the 1955 survey. Since that time a great number of improvements and alterations have been carried out. All unsatisfactory premises have been either demolished or rendered fit and the standards today are high.

OFFICES, SHOPS AND RAILWAYS ACT, 1963 : The Administration of this Act has necessitated a large number of visits and takes up a fair proportion of Inspectors' time. Nevertheless the Act was long overdue and some satisfaction may be derived from the present knowledge of the standards prevailing in such places of employment and of the improvements in working conditions that have been effected.

No cases of overcrowding were discovered during the year and such accidents as were reported were of a minor nature : slipping on polished or greasy floors and falls on staircases were not uncommon. All accidents were investigated and remedial measures taken if necessary. Defects in lighting were common and the importance of satisfactory lighting was not always appreciated.

No prosecutions were necessary during the year and occupiers were found to be generally co-operative.

RECORD OF INSPECTIONS.

Accumulations	...	...	...	...	...	...	43
Atmospheric Pollution	...	...	...	...	...	...	60
Bakehouses	...	...	...	...	...	...	25
Caravans	...	...	...	...	...	...	2
Drainage works	...	...	...	...	...	...	44
Drains tested	...	...	...	...	...	...	—
Drains repaired	...	...	...	...	...	...	26
Drains inspected	...	...	...	...	...	...	39
Disinfestations	...	...	...	...	...	...	31
Factories	...	...	...	...	...	...	97
Fish Friers	...	...	...	...	...	...	27
Food shops	...	...	...	...	...	...	294
Food preparers	...	...	...	...	...	...	51
Housing Acts	...	...	...	...	...	...	351
Improvement Grants	...	...	...	...	...	...	114
Ice Cream premises	...	...	...	...	...	...	20
Infectious Disease Fumigations	...	...	...	...	...	...	—
Interview with owners/occupiers	...	...	...	...	...	...	393
Licensed premises	...	...	...	...	...	...	35
Marine Stores	...	...	...	...	...	...	14
Market Stalls	...	...	...	...	...	...	203
Milk shops and Dairies	...	...	...	...	...	...	54
Offices, Shops and Railway Premises Act	...	...	...	...	...	...	89
Outworkers	...	...	...	...	...	...	—
Overcrowding	...	...	...	...	...	...	—
Pet Animals Act	...	...	...	...	...	...	9
Public Health Acts	...	...	...	...	...	...	161
Rag Flock Act	...	...	...	...	...	...	—
Rent Act, 1957	...	...	...	...	...	...	2
Repairs revisits	...	...	...	...	...	...	140
Restaurants	...	...	...	...	...	...	40
Rodent Control	...	...	...	...	...	...	149
Slaughterhouses	...	...	...	...	...	...	774
Swimming Baths	...	...	...	...	...	...	19
Verminous premises	...	...	...	...	...	...	—
Vessels in harbour	...	...	...	...	...	...	27
Water Samples	...	...	...	...	...	...	27
Miscellaneous	...	...	...	...	...	...	212
Total							3572

SECTION B.

FOOD

- I. Food premises in the district numbered 210.
- II(a) Premises registered under the Food and Drugs Act :
- | | | | |
|---|-----|-----|----|
| Ice Cream (sale or storage) | ... | ... | 70 |
| Potted, pickled preserved food
(meat products, fish cakes, etc.) | ... | ... | 18 |
| Fried Fish Shops | ... | ... | 7 |

II(b) Dairies and Milk Supply.

All milk sold in the district is Tuberculin Tested, Pasteurised or Sterilised, and 17 persons are registered as dealers for the sale of milk by retail. Premises registered for the storage of milk number 15.

Licences are issued by the County Council and sampling and supervision are carried out by this department. Practically all milk sold in the Borough is now bottled outside the district and dealers are merely distributors of the bottled product. No progress has been made towards the distribution of all milk in sealed disposable cartons and it would appear the glass bottle, with all its disadvantages, will be used for a considerable time yet.

Sampling results were as follows :—

Pasteurised	11	Satisfactory
T.T. Untreated	3	Satisfactory

III. Food shops and premises handling food were visited during the year for a variety of reasons. Hygiene standards were maintained generally. A number of occupiers and staff were instructed on codes of practice in food handling.

IV, Educational Activity.

No organised talks or lectures were held on this subject. It is still considered that direct contact with persons employed in the food trade is most effective under working conditions and this method is adopted.

V. Disposal of Condemned Foodstuffs.

Unfit foodstuffs from shops and stores (which consist mostly of tinned goods) were destroyed by deep burying in the Corporation's tip at Overend. Unsound meat and animal wastes from the slaughterhouses were collected several times a week for industrial processing.

VI. No large stocks of food were examined during the year.

OTHER ARTICLES OF FOOD SURRENDERED

Tinned Meats	...	...	...	...	...	1843 lbs.
Tinned Fruits	...	...	...	...	...	867 lbs.
Tinned Vegetables	...	...	...	...	...	1135 lbs.
Tinned Fish	...	...	...	...	...	471 lbs.
Tinned Milk	...	...	...	...	...	77 lbs.
Tinned Soups	...	...	...	...	...	127 lbs.
Biscuits	...	...	...	...	...	259 lbs.
Cereals	...	...	...	...	...	247 lbs.
Cheese	...	...	...	...	...	486 lbs.
Confectionery	...	...	...	...	...	124 lbs.
Fats	...	...	...	...	...	31 lbs.
Preserves	...	...	...	...	...	13 lbs.
Poultry	...	...	...	...	...	25 lbs.
Pickles	...	...	...	...	...	2 lbs.
Sauces	...	...	...	...	...	6 lbs.
Sausages	...	...	...	...	...	41 lbs.
Total						5754 lbs.

VII. Ice Cream Heat Treatment Regulations.

A large number of foodshops are registered for the sale of ice cream and these are inspected regularly. The ice cream is pre-packed, of nationally known brands and sold from refrigerated cabinets. There is one manufacturer in the district.

VIII. Food Hygiene Regulations.

Nearly all food premises received one or more visits during the year and the standards generally were satisfactory. Multiple firms were found to achieve the highest standards in hygiene but even so, advice on minor unsatisfactory practices was necessary. No prosecutions were brought during the year under these Regulations.

SLAUGHTERHOUSE AND MEAT INSPECTION.

There are two slaughterhouses in the district, the larger situated at Pottery Road is a large private slaughterhouse owned by the North Western Wholesale Meat Co., and supplies meat and meat products not only to West Cumberland but to towns in the N.E. This slaughterhouse gives facilities to local butchers to slaughter their own animals if desired, but many butchers now buy their meat "off the hook." The other slaughterhouse is a small establishment attached to a single butcher's business.

One inspector is employed full time on meat inspection duties. A charge is made for this service and all carcasses are stamped before leaving the premises.

Every animal is inspected and the slaughterhouses are satisfactorily operated.

The following table shows the number of carcasses inspected and condemned :—

CARCASSES INSPECTED AND CONDEMNED

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs	Horses
Number killed	5,100	1,235	75	20,259	6,533	—
Number inspected	5,100	1,235	75	20,259	6,533	—
All Diseases except Tuberculosis and Cysticerci.						
Whole carcasses condemned	3	9	2	37	14	—
Carcasses of which some part was condemned	1,043	—	—	863	85	—
Percentage of the number inspected affected with disease other than Tuber- culosis and Cysticerci	14.88	—	2.66	4.21	1.52	—
Tuberculosis only.						
Whole carcasses condemned	—	—	—	—	—	—
Carcasses of which some part or organ was condemned	1	—	—	—	—	—
Percentage of the number inspected affected with Tuberculosis	0.02	—	—	—	—	—
Cysticercosis.						
Carcasses of which some part or organ was condemned	—	—	—	—	—	—
Carcasses submitted to treat- ment by refrigeration	—	—	—	—	—	—
Generalised and totally condemned	—	—	—	—	—	—

Total Weight of Meat Condemned : 13 Tons, 10 Cwts., 93 lbs.

WATER SUPPLY

The entire water supply for the district is under the control of the South Cumberland Water Board.

I. Water is gravity fed from Ennerdale Lake through the treatment house situated near the intake point and flows to the pumping station at Summergrove, from whence it is pumped to several reservoirs for distribution. All reservoirs are closed type save the one situated at Scragill, Whitehaven.

II. The water is treated at the treatment house for hardness rectification and chlorination dosage. Bacteriological examinations were taken at regular intervals and results are shown in the Appendix to this report. The water is upland and is naturally soft.

III. There is no evidence of plumbo-solvency.

IV. The gathering grounds are free from contamination by human drainage or other undesirable matter, the few farms situated on the western side of the lake have suitable treatment works for drainage and a single hotel which formerly drained into the lake has now been demolished, thus removing one source of possible pollution.

V. The number of dwellinghouses supplied with water was 8,246 and the population 26,960.

Sewerage : The district is fully sewered except for parts of the village of Sandwith, where a small sewage disposal unit was installed this year, and the entire sewage is discharged untreated to the sea on an unattractive part of the coast which is heavily polluted and fortunately little frequented. No change has taken place in the system of sewage disposal since it was introduced in 1860.

SECTION C.

MISCELLANEOUS

I. Factories Act.

A table is appended showing the factories in the district and the inspections carried out.

II. The Offices, Shops and Railway Premises Act, 1963.

Since this useful and much needed legislation was introduced standards have improved generally in many offices and shops. The initial inspections showed a large number of contraventions and even in modern establishments contraventions were common. This state of affairs was to be expected. Suitable lighting was by far the most common fault.

Nearly all premises have now been inspected and re-inspections carried out as necessary. No prosecutions occurred and most occupiers were found to be co-operative. No serious accidents occurred during the year.

III. Rag Flock and Other Filling Materials Act, 1951.

There are now no premises remaining in the district.

IV. Offensive Trades.

There are two premises registered; one a rag and bone dealer and the other a tripe and gut preparer. The trade is small and no nuisances arose.

V. Rodent Control.

While the incidence of rat and mouse infestation was stable a noticeable feature during the year was the discovery that mice in the district had become immune to Warfarin poison. Samples of live mice, taken from various points, were fed on pure Warfarin only for 14 days and they thrived remarkably (the same bait killed rats). A bait containing alphachlorolose was immediately introduced with great success and this is still the practice.

The sewers and refuse tips are treated regularly. Private dwellings are treated free of charge and treatment given to other premises as necessary. Many business premises employ a specialist company.

VI. Smoke Abatement and Atmospheric Pollution.

Little further progress can be reported on this subject since the improvements (previously reported) were carried out on the emission of smoke from factories, shunting locomotives and other installations. The principal source of pollution from smoke continues to be the domestic fire consuming raw coal and a report was submitted on this important aspect of environmental health in April, 1969. This report made certain recommendations on achieving smokeless zones but it is evident that a great deal of

preparatory work is necessary before further consideration can be given. In the meantime every encouragement is given towards smoke elimination by the installation of approved appliances in new properties at the planning stage.

Atmospheric pollution other than smoke continues to occur from a large chemical factory on the weather side of the town and this position, with prevailing S.W. winds, gives rise to nuisance from time to time. Close attention is paid to this undertaking and co-operation with the Alkali Inspectorate is maintained. The factory produces a variety of chemicals including large quantities of sulphuric acid, and the emissions from this particular process have been the cause of much concern in the past. However, in recent months, following discussions with the company, the situation has improved and it is hoped that the very difficult task of acid mist removal will be overcome by the installation of new filtering plant.

VII. Collection and Disposal of Refuse.

This service is undertaken by the Borough Surveyor's Department. The introduction of the paper sack in lieu of the dustbin has shown satisfactory improvement from the hygiene point of view apart from other advantages. Collected refuse is disposed of by burying in a large quarry, but this is nearly filled and an alternative disposal site will be necessary before long. The future disposal of refuse has been under serious consideration during the year by the appropriate committee. Very careful thought will be needed before incineration is chosen as a means of disposal, and it is my view that the restoration of poor land by efficient controlled tipping is the most prudent solution.

VIII. Disinfections and Verminous Premises.

Apart from seasonal trouble from housefly this problem is very much reduced doubtless due to a greater awareness of occupiers, improved housing standards and the use of modern insecticides. Treatment for ants and cockroaches was necessary during the year.

IX. Public Swimming Baths.

The Public Baths owned and managed by the local authority continued to be well patronised during the year. Chlorinated water is drawn from the town mains and a continuous circulation is maintained through sand filters. The water is treated with a suitable chlorine dosage. Bacteriological sampling was carried out and the water proved satisfactory.

I am,

Yours faithfully,

ARTHUR A. BELDON,
Chief Public Health Inspector.

APPENDIX

WATER ANALYSIS

Date	Before or after Chlorination	Probable number of Coliform organisms in 100 mls.	Esch. Coli Type 1	Remarks
20.1.69	After	Nil	Nil	Excellent
10.2.69	"	Nil	Nil	Colony count less than 10 per ml.
22.4.69	"	Nil	Nil	do
5.5.69	"	Nil	Nil	Excellent
9.6.69	"	Nil	Nil	do
1.7.69	"	Nil	Nil	do
27.8.69	"	Nil	Nil	do
22.9.69	"	Nil	Nil	do
20.10.69	"	3	1	Unsatisfactory
17.11.69	"	Nil	Nil	Excellent
16.12.69	"	Nil	Nil	do

SWIMMING BATHS WATER ANALYSIS

Date	Before or after Chlorination	Overend School	Probable No. of coliform organisms per 100 mls.	Esch. Coli Type 1	Remarks
20.1.69	After	Overend School	Nil	Nil	Colony count less than 10/ml.
10.2.69	"	Overend School	Nil	Nil	do
22.4.69	"	Overend School	Nil	Nil	do
5.5.69	"	Overend School	Nil	Nil	do
		Public Swimming Baths	Nil	Nil	do
19.6.69	"	Overend School	1	1	Colony Count consi- derably over 100/ml. Less than 10/ml. Less than 10/ml.
1.7.69	"	Public Swimming Baths	Nil	Nil	do
	"	Overend School	Nil	Nil	do
27.8.69	"	Public Swimming Baths	Nil	Nil	do
	"	Overend School	Nil	Nil	do
22.9.69	"	Public Swimming Baths	Nil	Nil	do
	"	Overend School	Nil	Nil	
20.10.69	"	Public Swimming Baths	Nil	Nil	do
	"	Overend School	Nil	Nil	do
17.11.69	"	Public Swimming Baths	Nil	Nil	Nil
	"	Overend School	Nil	Nil	Nil
6.12.69	"	Public Swimming Baths	Nil	Nil	Nil
	"	Overend School	Nil	Nil	Nil

Public Analyst's Laboratory,
30 Watergate Street,
CHESTER, CH1 2LA.
7th January, 1970.

To : A. A. Beldon, Esq.,
Chief Public Health Inspector,
53 Duke Street,
WHITEHAVEN.

REPORT upon the analysis of one sample of water received on
19th December, 1969.

Sample marked : "Ennerdale Water," taken from near pump house
15.12.69. Public supply.

ANALYSIS :

Appearance	...	...	...	...	...	Clear
Odour	...	...	...	...	...	Nil
Reaction, pH	...	...	...	...	...	6.2
Colour (Hazen Units)	...	...	...	...	...	less than 5 parts per million
Total solids	...	...	...	...	...	47
Nitrogen as free and saline ammonia	...	...	...	...	...	0.00
Nitrogen as albumoid ammonia	...	...	...	...	...	0.00
Nitrogen as nitrites	...	...	...	...	...	Nil
Nitrogen as nitrates	...	...	...	...	...	less than 0.5
Chlorides as Cl	...	...	...	...	...	2
Oxygen absorbed from permanganate in 4 hours at 27°C.	...	...	...	...	...	1.3
Total hardness	...	...	...	...	...	11
Temporary hardness	...	...	...	...	...	5
Permanent hardness	...	...	...	...	...	6
Alkalinity	...	...	...	...	...	5
Total Residual Chlorine	...	...	...	...	...	Nil
Free Available Chlorine	...	...	...	...	...	Nil
Potassium as K	...	...	...	...	...	0.4
Anionic synthetic detergents	...	...	...	...	...	—
Manganese as Mn	...	...	...	...	...	—
Cyanides and thiocyanates	...	...	...	...	...	—
Poisonous metals	...	...	...	...	...	Nil

Opinion.

The water is soft and may be expected to be corrosive to
metals. Bacteriologically it is unsuitable for use in its present con-
dition without effective chlorination.

for RUDDOCK & SHERRATT.

Signed : J. Graham Sherratt.

**Annual Report of the
Medical Officer of Health
for the
Borough of Whitehaven
in the
County of Cumberland**

**Prescribed Particulars on the Administration
of the Factories Act, 1961**

PART 1 OF THE ACT.

1. INSPECTIONS for purposes of provisions as to health.

Premises	No. on Register	Number of Inspections	Number of Written notices	Occupiers Prosecuted
(1)	(2)	(3)	(4)	(5)
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	9	43	—	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	87	65	—	—
(iii) Other Premises in which Section 7 is enforced by the Local Authority (excluding outworkers' premises)	12	12	—	—
Total	108	120	—	—

2. Cases in which DEFECTS were found.

			Number of cases in which Defects were found		number of cases in which prose- cutions were in- stituted
Particulars	Found	Reme- died	Referred to H.M. In- spectors	by H.M. In- spectors	
(1)	(2)	(3)	(4)	(5)	(6)
Want of cleanliness (S.1.) ...	—	—	—	—	—
Overcrowding (S.2) ...	—	—	—	—	—
Unreasonable temperature (S.3)	—	—	—	—	—
Inadequate ventilation (S.4)	—	—	—	—	—
Ineffective drainage of floors (S.6) ...	—	—	—	—	—
Sanitary Conveniences (S.7)					
(a) Insufficient ...	—	—	—	—	—
(b) Unsuitable or defective	5	5	—	—	—
(c) Not separates for sexes	—	—	—	—	—
Other offences against the Act (not including offences relating to Out Work)	—	—	—	—	—
Total	5	5	—	—	—

PART VIII OF THE ACT.

OUTWORK

(Sections 133 and 134)

Nature of Work	Section 133			Section 134		
	No. of Out- Workers in August list required by Section 110(1) (c)	No. of cases of default in sending lists to the Council	No. of prose- cutions for failure to supply lists	No. of instances of work in unwhole- some premises	Notices served	Prose- cution
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Wear (Making apparel, etc.)	3	—	—	—	—	—
Cleaning and washing Household linen	—	—	—	—	—	—
Lace, lace curtains and nets	—	—	—	—	—	—
Curtains and furniture hangings	—	—	—	—	—	—
Furniture and upholstery	—	—	—	—	—	—
Electro-plating	—	—	—	—	—	—
File making	—	—	—	—	—	—
Brass and brass articles	—	—	—	—	—	—
Fur pulling	—	—	—	—	—	—
Iron and Steel cables and chains	—	—	—	—	—	—
Iron and Steel an- chors and grapnels	—	—	—	—	—	—
Cart gear	—	—	—	—	—	—
Locks, latches and keys	—	—	—	—	—	—
Umbrellas, etc.	—	—	—	—	—	—
Artificial flowers	—	—	—	—	—	—
Nets, other than wire nets	—	—	—	—	—	—

PART VIII OF THE ACT.

OUTWORK

(Sections 133 and 134)

Nature of Work	Section 133			Section 134		
	No. of Out- Workers in August list required by Section 110(1) (c)	No. of cases of default in sending lists to the Council	No. of prose- cutions for failure to supply lists	No. of instances of work in unwhole- some premises	Notices served	Prose- cution
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Tents	—	—	—	—	—	—
Sacks	—	—	—	—	—	—
Racquet and tennis balls	—	—	—	—	—	—
Paper bags	—	—	—	—	—	—
The making of boxes or other receptacles or parts thereof made wholly or partially of paper	—	—	—	—	—	—
Brush making	—	—	—	—	—	—
Pea picking	—	—	—	—	—	—
Feather sorting	—	—	—	—	—	—
Carding etc., of buttons, etc.	—	—	—	—	—	—
Stuffed toys	—	—	—	—	—	—
Basket making	—	—	—	—	—	—
Chocolates and sweetmeats	—	—	—	—	—	—
Cosaques, Christmas stockings, etc.	—	—	—	—	—	—
Textile weaving	—	—	—	—	—	—
Lampshades	—	—	—	—	—	—
Total	3	—	—	—	—	—

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